REVISED SUPPLEMENT (2),

1918,

RELATING TO THE

MEDITERRANEAN PILOT, VOL. V.

FIRST EDITION,

1915.

(Corrected to 3rd October, 1918.)

PUBLISHED BY ORDER OF THE LORDS COMMISSIONERS OF THE ADMIRALTY.

LONDON:
PRINTED FOR THE HYDROGRAPHIC DEPARTMENT, ADMIRALTY,
Under the Authority of His Majesty's Stationery Office,
By TAYLOR, GARNETT, EVANS, & Co., Ltd.,
also at Manchester and Reddish;
and to be obtained from
J. D. POTTER, Agent for the Sale of Admiralty Charts,
145, MINORIES, E.1.

1918.

Gratis to Purchasers of Mediterranean Pilot, Vol. V.

NOTICE.

HYDROGRAPHIC DEPARTMENT, ADMIRALTY.

The next Supplement to this book which may be published will be obtainable gratuitously from the Admiralty Agent or Sub-Agents for the sale of charts on presentation of the coupon below, either personally or by letter. In the latter case the cost of postage must be enclosed.

Supplement No. 4 to
MEDITERRANEAN PILOT, Vol. V.,
1915.

11540

REVISED SUPPLEMENT (2),

1918,

RELATING TO THE

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Gratis to Purchasers of Mediterranean Pilot, Vol. V.

ADVERTISEMENT TO THE REVISED SUPPLEMENT (2).

This Revised Supplement, compiled by Captain C. V. Smith, R.N., contains all the information received in the Hydrographic Department of the Admiralty relating to the Mediterranean Pilot, Vol. V., First Edition, since its publication in 1915.

New matter and alterations, &c., are indicated in the following manner:—

(1) Entirely new paragraphs by a broad marginal line.
(2) New or altered portions of paragraphs are underlined with a broad line.
(3) Paragraphs deleted are indicated by a bracket extending across the page.
(4) Portions of paragraphs deleted are indicated by a similar bracket, three-quarters of an inch long.

A list of charts published and withdrawn since the issue of the Pilot, in 1915, and which affect this work, has been added as an appendix.

It must be remembered that during the present state of hostilities many of the aids to navigation referred to in Mediterranean Pilot, Vol. V., and this Supplement, have been modified or withdrawn without notice.

Revised Supplement 1917 and all Notices to Mariners relating to the above work, up to and including 694, of 1918, are hereby cancelled.

J. F. PARRY,
Rear Admiral,
and Hydrographer.

Hydrographic Department,
Admiralty, London,
5th October, 1918.

(11540). Wt. 18666/167 (40). 5,000. 10/18. T.G.E.

ADVERTISEMENT TO THE REVISED SUPPLEMENT (2).

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Revised Supplement 1917 and all Notices to Mariners issued since work up to and including end, 1917, are readily available.

J. E. PARGITT,
Rear-Admiral,
and Hydrographer.

Hydrographic Department,
Admiralty,
London, S.W.
1st October, 1918.

(H.S.O. 1). WT. 15000—T. 1. 10/18. [illegible]

The existence of this Revised Supplement is to be entered in the Tabular form within the cover of the Mediterranean Pilot, Vol. V. The information in it is to be carefully considered.

This Supplement may be retained intact for reference, notations referring to it being made in the pages of Mediterranean Pilot, Vol. V., or may be cut up, if considered desirable, the slips being pasted in the volume at the appropriate place.

REVISED SUPPLEMENT (2),

1918,

RELATING TO THE

MEDITERRANEAN PILOT, VOL. V.

FIRST EDITION,

1915.

(CORRECTED TO 3RD OCTOBER, 1918.)

The several paragraphs follow the order of the paging of the Mediterranean Pilot, Vol. V., the pages referred to being given in the text.

(All bearings are True.)

GENERAL NAVIGATION.

Page xxiv.—*Cancel* Article 10 and *substitute*:—

10. *Tides and Tidal Streams.*—In navigating coasts where the tidal range is considerable, caution is always necessary. It should be remembered that there are indraughts to all bays and bights, although the general run of the stream may be parallel to the shore.

The turn of the tidal stream off-shore is seldom coincident with the time of high and low water on the shore. In open channels, the tidal stream ordinarily overruns the turn of the vertical movement

Page xxiv. *continued.*

of the tide by about three hours, forming what is usually known as tide and half-tide, the effect of which is that at high and low water by the shore the stream is running at its greatest velocity.

In crossing a bar or shallow flats, Tidal diagrams to show the height of the tide at any time for any place, given in the Tide Tables, will be found of great assistance in calculating how much the water has risen or fallen at any hour of the tide.

On coasts where there is much diurnal inequality in the tides, the amount of rise and fall can never be depended upon, and additional caution is necessary.

The datums used on the charts of different nations vary considerably. That adopted for the Admiralty charts founded on surveys carried out by the surveying vessels of the Royal Navy is, in waters where the diurnal inequality is small, the level of mean low water springs, and in waters where the diurnal tides are considerable, the level of Indian spring low water.

As, however, a very long series of tidal observations is required before either of these levels can be definitely determined, and as the chart datum depends, in most cases, on a few weeks' observations only, the datums adopted must always be considered as approximate, and differ, in some cases, considerably from the theoretical datum.

Where Admiralty charts are founded on the charts of other nations, the datum is that used by the original authority. This may be mean low water springs (Denmark, Norway, Japan, &c.), mean low water (Netherlands, U.S. Atlantic coast, &c.), mean lower low water (U.S. Pacific coast, Philippines, &c.), a definite distance below mean low water springs (Germany), or the lowest possible low water (France, Spain, &c.). All these datums must be considered as approximate only.

Whenever it is known, a comparison between mean low water springs or Indian spring low water and the datum is given on Admiralty charts.

It should also be remembered that at times the tide falls below the level of mean low water springs. This always occurs on the coasts of Europe at the equinoxes, but in other parts of the world, and especially in the tropics, such periodic low tides may coincide more frequently with the solstices. Wind or a high barometer may produce it at any time, and the amount varies with locality. When the moon's perigee coincides with the full or new moon the same effect is often produced.

Caution.—From the above remarks it will be seen that the depths shown on Admiralty charts are not always the least depths that will be found to exist, due to the fact that the level of the chart datum is, in most cases, above the level to which the tide may fall.

at the tide by about three hours, during which is usually known as low and highwater, the time when the tide at high and low water by the shore the stream is running at its greatest velocity.

In crossing a bar or shallow flats, Trial drawings to show the height of the tide at any time for any place given in the Tide Tables will be found of great assistance in calculating if much the water has risen or fallen at any hour of the tide.

On coasts where there is much diurnal inequality in the tides, the amount of rise and fall can never be depended upon, and absolute caution is necessary.

The datums used on the charts of different nations vary considerably. That adopted for the Admiralty charts founded on surveys carried out by the surveying vessels of the Royal Navy is in water where the diurnal inequality is small, the level of mean low water springs, and in waters where the diurnal range is considerable the level of Indian spring low water.

In, however, a very long series of tidal observations is required before either of these levels can be definitely determined, and as the chart datum depends, in most cases, on a few weeks' observations only, the datums adopted must always be considered as approximate, and differ, in some cases, considerably from the theoretical datum.

Where Admiralty charts are found, on the charts of other nations, the datum is that used by the original authority. This may be mean low water springs (Denmark, Norway, Japan, &c.), mean low water (Netherlands, U.S., Atlantic coast, &c.), mean lower low water (U.S. Pacific coast, Philippines, &c.), a definite distance below mean low water springs (Germany), or the lowest possible low water (France, Spain, &c.). All these datums must be considered as approximate only.

Wherever it is known, a comparison between mean low water springs or Indian spring low water and the datum is given on Admiralty charts.

It should also be remembered that at times the tide falls below the level of mean low water springs. This always occurs on the coasts of Europe at the equinoxes, but in other parts of the world, and especially in the tropics, such periodic low tides may occur more frequently with the solstices. Wind or a high barometer may produce it at any time, and the amount varies with locality. When the moon's perigee coincides with the full or new moon the same effect is often produced.

Caution.—From the above remarks it will be seen that the depths shown on Admiralty charts are not always the least depths that will be found to exist, due to the fact that the level of the chart datum is in most cases above the level to which the tide may fall.

CHAPTER I.

Page 1.—Heading: *For* "Tripoli" *read* "Libia."
Line 1: *For* "**TRIPOLI (Libia)**" *read* "**LIBIA** (Tripoli)."

Page 2.—*Before* "confined" *insert* "chiefly."

Page 3.—Egypt.—Communications.—A railway extends westward from Alexandria as far as Mersa Matruh.

Canals.—There are some 700 miles of navigable canals in the Nile delta. The principal of these canals being the Mamudiyeh, 48 miles in length, from Alexandria to the Rosetta branch of the Nile; the Rayah Menufia and the Baguria canal, 70 miles in length, from the Delta barrage to Qoddaba on the Rosetta branch of the Nile; Bahr Shibbin, branching off from the Rayah Menufia, with the Rayah Abbas, 140 miles in length, from the Delta barrage to the sea; the Rayah Tewfiki and the Mansura canal, 63 miles in length, from the Delta barrage to Mansura on the Damietta branch of the Nile; and the Ismailia canal, 80 miles in length, from Cairo to Ismailia.

The Rayah Behera, which leads from the Delta barrage along the left bank of the Rosetta branch of the Nile, a distance of 50 miles, has a better depth of water than the other navigable canals, but does not as yet open at its lower end into the Nile by a navigable passage.

The vessels using the above canals, with the exception of the Ismailia canal, have the following maximum dimensions:—

	Length feet	Breadth feet	Depth feet
Steam or motor barges	130	23	6½
Cargo barges	98	20	6½
Tugs	72	15	5½
Country boats	72	20	6½

The Rayah Behera does not admit vessels exceeding 115 feet in length.

Navigation ceases on the Rosetta and Damietta branches of the Nile when the river falls below a certain level (13·30 and 30·60 metres, respectively, as indicated by the gauge readings at the Delta barrage).

When the sadds (barriers) are constructed near the lower ends of these branches to raise the water level, navigation to and from the sea is impossible from April to August.

Page 7.—Line 18: *For* "**Tripoli**" *read* "**Libia.**"

Page 10.—Barometer.—The graduation of barometric scales in millibars having now been largely introduced, the accompanying diagram is inserted to enable the mariner to convert millibars into inches, and vice versâ.

CORRECTIONS.

Page 1.—Insert, After "Tripoli" and "Lima"

Insert, After "TRIPOLI (Libya)" and "LIBIA (Tripoli)"

Page 2.—Insert "Tripoli" under "Geology."

Page 3.—Egypt.—Communications.—Railway, canals and roads. After "Nile" insert "Nile Mouth."

Canals. There are some 700 miles of navigable canals in the Nile delta. The principal of these canals being the Mahmudiyeh, 44 miles in length, from Alexandria to the Rosetta branch of the Nile; the Bahr Menuf and the Bahr Zenna, 70 miles in length, from the Delta barrage to Damietta on the Rosetta branch of the Nile; the Bahr Shibin, 40 miles, from the Bahr Menuf, with the Bahr Abu Ali, 12 miles in length, from the Delta barrage to the sea; the Bahr Tewfik and the Abu Ali canal, 63 miles in length, from the Delta barrage to Mansura on the Damietta branch of the Nile; and the Ismailia canal, 50 miles in length, from Cairo to Ismailia.

The Bahr Menuf and roads from the Delta barrage to the Damietta branch of the Nile, a distance of 40 miles, has a better depth of water than on the other navigable canals, but does not depend upon it for water, it is the Nile by a navigable canal.

The canals serving the Delta are, with the exception of the Ismailia canal, have the following approximate dimensions:—

	Depth.	Bottom.	Surface.
Bahr Menuf	10	33	65
Bahr Zenna	9	23	45
Tewfik	10	15	7
Abu Ali	12	30	6

The depth [illegible] at least [illegible] according [illegible] in depth.

Navigation [illegible] the Rosetta and Damietta branches of the Nile where the river falls below a certain level (12.20 and 10.60 metres), especially, as indicated by the gauge, [illegible] at the barrage. Within the delta [illegible] are constructed near the level of the barrages to [illegible] navigation to and from the sea [illegible] from Km 2 to Km [illegible].

Page 7.—Line 8: After "Tripoli" and "Libia."

Page 10.—Reservoir.—The application of [illegible] is [illegible] the accompanying diagram is inserted to [illegible] to sorted [illegible] into [illegible] and [illegible].

Page 11.—Line 8: *For* "**Tripoli**" *read* "**Libia.**"

Egypt.—Buoyage.—When approaching from seaward all starboard-hand buoys are conical, and port-hand buoys can.

Turkey.—Buoyage system.—The starboard side of a channel is that side which would lie on the starboard hand of a ship approaching from seaward. That side of the channel which would lie on the port hand of a ship approaching the channel is consequently the port side of the channel.

Red conical buoys will be placed on the starboard side, and white can buoys on the port side of a channel or strait.

Small red and white spherical buoys, fitted with staffs, will be placed on shoals which occur in the middle of a channel or strait, and which can be passed on both sides by shipping.

Spherical buoys placed on a shoal lying in the middle of a channel will be furnished, depending on their condition, either with a red cylinder or other topmark.

In the case of a channel or strait which cannot conveniently be buoyed on both sides, a single row of either red or white buoys will be laid down. Some of the buoys forming this row may be conical and others can buoys. In order to enable the buoys inside the channel to be easily seen and distinguished, a beacon buoy will be placed at the entrance of the channel, where the nature of the background renders this necessary; the topmark will be entirely red, and the buoy red or white, according as it lies in the line of buoys marking the starboard or port side of the channel.

In the case of winding channels and inlets containing numerous and extensive shoals, where the fairway for shipping may be considered as divided into a number of disconnected zones, beacon buoys will be placed at the extremities of each zone, in order that the limits may be clearly perceived, and a reliable guide to shipping afforded.

As regards the fairway, both the topmarks and the other parts of the buoys on the starboard side must be painted red. On the port side, the topmarks red and their other parts white. The topmarks of the beacons on the shoals in the fairway, which can be passed on both sides by shipping, must be entirely red, the other parts being painted with horizontal red and white stripes.

The topmarks belonging to one zone will be distinguished from those of other zones by their form. In places of this kind light-buoys and fixed beacons of peculiar colour, and carrying special topmarks, can be used.

Reckoning from the entrance to the channel, the buoys on the starboard side will have odd numbers painted on them in black, and those on the port side even numbers. On the starboard side of a channel or strait a red-coloured staff or pole beacon, or an uncoloured mast beacon, will be placed. On the port side a white-coloured

Page II.—Line 6. For "Tripoli" read "Libia."

Egypt.—Buoyage.—When approaching from seaward all starboard hand buoys are conical, and port hand buoys can.

Turkey.—Buoyage system.—The starboard side of a channel is that side which would lie on the starboard hand of a ship approaching from seaward. The port side of the channel which would lie on the port hand of a ship approaching the channel is consequently the port side of the channel.

Red conical buoys will be placed on the starboard side, and white can buoys on the port side of a channel or strait.

Small red and white spherical buoys, fitted with staffs, will be placed on shoals which occur in the middle of a channel or strait, and which can be passed on both sides by shipping.

Spherical buoys placed on a shoal lying in the middle of a channel will be furnished, depending on their condition, either with a red cylinder or other topmark.

In the case of a channel or strait which cannot conveniently be buoyed on both sides, a single row of either red or white buoys will be laid down. Some of the buoys forming this row may be conical and others can buoys. In order to enable the buoys inside the channel to be easily seen and distinguished, a beacon buoy will be placed at the entrance of the channel, where the nature of the background renders this necessary; the topmark will be entirely red, and the buoy red or white, according as it lies to the line of buoys marking the starboard or port side of the channel.

In the case of winding channels and inlets containing numerous and extensive shoals, where the fairway for shipping may be considered as divided into a number of discovered zones, beacon buoys will be placed at the extremities of each zone, in order that the limits may be clearly perceived, and a reliable guide to shipping afforded.

As regards the fairway, both the topmarks and the other parts of the buoys on the starboard side must be painted red. On the port side, the topmarks red and their other parts white. The topmarks of the beacons on the shoals in the fairway, which can be passed on both sides by shipping, must be entirely red, the other parts being painted with horizontal red and white stripes.

The topmarks belonging to one zone will be distinguished from those of other zones by their form. In places of this kind light buoys and fixed beacons of peculiar colour, and carrying special topmarks, can be used.

Reckoning from the entrance to the channel, the buoys on the starboard side will have odd numbers painted on them in black, and those on the port side even numbers. On the starboard side of a channel or strait a red-coloured staff or pole beacon, or an uncoloured mast beacon, will be placed. On the port side a white-coloured

Page 11 continued.

beacon without a staff, or an uncoloured perch beacon (the branched stump of a tree).

On shoals situated outside a channel, spar buoys, beacon buoys, any kind of buoy fitted with a staff, or fixed beacons will be placed on the shoal or in its vicinity. These buoys, with their topmarks, will always be painted red. The fixed beacons will have, as a rule, red topmarks, the remainder of the beacon, as occasion may require, will be painted white or red. Where their position renders it necessary, shoals will in some cases be marked by bell-buoys, light-buoys, or whistle-buoys. If it is only necessary to mark shoals on one side, as in the case of shoals extending from the shore, beacons either without topmarks or carrying special ones will be used.

Topmarks are used to indicate the direction in which the shoal lies. In the case of exceedingly small shoals, situated either inside or outside the channel, where it is not considered necessary to surround them with buoys, and where shipping can approach close to the beacons, the topmark will be a cylinder of height equal to its diameter. While this topmark may also be carried by a buoy marking a sunken vessel, it may not be used in any other place.

In the case of an extensive shoal, situated inside or outside the channel where it is considered necessary to place buoys, they will carry topmarks as described below:—

On a buoy or beacon on the north side of a shoal	Two conical topmarks, each point upwards.
On a buoy or beacon on the south side of a shoal	Two conical topmarks, each point downwards.
On a buoy or beacon on the east side of a shoal	Two conical topmarks, points away from each other.
On a buoy or beacon on the west side of a shoal	Two conical topmarks, points towards each other.

To indicate the position of a submerged wreck, conical buoys, truncated conical buoys, or cask or barrel buoys will be used; they will be painted green, and have in Turkish the word for "Wreck" written on them in white. These wreck buoys will carry a staff, and, according to their position, will exhibit a cylindrical topmark, or the conical shapes mentioned above.

To mark the position of telegraph cables green spherical buoys are used. On these buoys the word for "Telegraph" or the equivalent for letter "T" will be painted in white in Turkish character.

In order to indicate the limits of quarantine areas, yellow buoys or conical beacons must be used.

In order to denote the limits of areas temporarily closed to shipping, while appropriated for experiments or practice from guns and torpedoes, yellow cask or barrel buoys, fitted with small pennants, will be used.

beacon without a staff, or an unpainted perch beacon (i.e. branched stump of a tree).

On shoals situated outside a channel, spar buoys, beacon buoys, any kind of buoy fitted with a staff, or fixed beacons will be placed on the shoal or in its vicinity. These buoys, with their topmarks, will always be painted red. The fixed beacons will have, as a rule, red topmarks, the remainder of the beacon, as occasion may require, will be painted white or red. Where their position renders it necessary, shoals will in some cases be marked by bell-buoys, light-buoys, or whistle-buoys. If it is only necessary to mark shoals on one side, as in the case of shoals extending from the shore, beacons either without topmarks or carrying special ones will be used.

Topmarks are used to indicate the direction in which the shoal lies. In the case of exceedingly small shoals, situated either inside or outside the channel, where it is not considered necessary to surround them with buoys, and where shipping can approach close to the beacons, the topmark will be a cylinder of height equal to its diameter. While this topmark may also be carried by a buoy marking a sunken vessel, it may not be used in any other place.

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To indicate the position of a submerged wreck, conical buoys, truncated conical buoys, or cask or barrel buoys will be used; they will be painted green, and have in Turkish the word for "Wreck" written on them in white. These wreck buoys will carry a staff, and, according to their position, will exhibit a cylindrical topmark, or the conical shapes mentioned above.

To mark the position of telegraph cables green spherical buoys are used. On these buoys the word for "Telegraph" or the equivalent for letter "T" will be painted in white in Turkish character.

In order to indicate the limits of quarantine areas yellow buoys or conical beacons must be used.

In order to denote the limits of areas temporarily closed to shipping, while appropriated for experiments or practice from guns and torpedoes, yellow cask or barrel buoys, fitted with small pennants, will be used.

Page 14.—Line 42: *For* "Tripoli" *read* "Libia."

Page 15.—Line 20: *For* "Tripoli" *read* "Libia."

Line 25: *For* "in Tripoli" *read* "in Libia."

CHAPTER II.

Pages 16-54.—Headings: *For* "Tripoli" *read* "Libia."

Chart 249, Mahedia to Ras Makhabez.

Page 17.—Ras Makhabez.—The beacon has been removed.

Bou Kemesh bay.—The buoys and posts marking the entrance channel have been withdrawn.

Chart 246, Ras Makhabez to Benghazi.

Page 18.—Zuara.—The light, formerly exhibited from the signal mast, has been discontinued.

A light is exhibited from a grey post beacon on Tuara peninsula, at a height of 39 feet.

Plan 248, Harbour of Tripoli.

Page 20.—Line 4 from bottom: *For* "southward" *read* "1½ cables south-west."

North channel.—The light-buoy with green light, formerly moored on the northern side of the channel, has been withdrawn.

Page 21.—North channel.—Line 2: *For* "abreast the buoy just mentioned" *read* "one cable southward of the extreme of the mole and northward of the western part of Middle shoal."

Mooring buoys.—*Delete* the paragraph, lines 3 and 4 from top, and *insert*:—

There are four mooring buoys in the harbour, situated about half a cable off and parallel to the wharf extending from Spanish fort.

Harbour works.—*Delete* the whole paragraph, and *insert*:—

The construction of the mole or breakwater along the reefs north-eastward of Spanish fort is completed. It extends 7½ cables in a 65° true direction from Spanish fort, to its elbow, from whence it curves in a south-east direction for a further distance of 3½ cables; its extreme forms the north side of entrance to the harbour.

Jetty lights.—Line 3: *After* "exhibited" *delete* remainder of sentence and *insert* "at a height of 12 and 18 feet."

Page 22.—Directions.—Line 15: *After* "true" *omit* the remainder of the paragraph. The neighbourhood has been dredged, and there is now a depth of 4¼ fathoms through the entrance between the end of the breakwater and the *occulting red* light-buoy.

Line 36: *After* the word "so" *delete* remainder of sentence.

Further dredging is intended.

Page 14.—Line 42: For "Tripoli" read "Libia."

Page 15.—Line 20: For "Tripoli" read "Libia."

Line 25: For "in Tripoli" read "in Libia."

CHAPTER II.

Pages 18-24.—Headings: For "Tripoli" read "Libia."

Chart 239, Medina to Ras Mukaiber.

Page 17.—**Ras Mukaiber.**—The beacon has been removed.

Bon Kenresh bay.—The buoys and posts marking the entrance channel have been withdrawn.

Chart 240, Ras Mukaiber to Derna.

Page 18.—**Zmara.**—The light formerly exhibited from the signal mast, has been discontinued.

A light is exhibited from a grey post beacon on Tiara peninsula, at a height of 30 feet.

Plan 242, Harbour of Tripoli.

Page 20.—Line 4 from bottom: For "[illegible]" read "[illegible] west."

North channel.—The light buoy with green light formerly moored on the northern side of the channel has been withdrawn.

Page 21.—**North channel.**—Line 2: For "shower the buoy just mentioned" read "one cable southward of the extreme of the mole and northward of the western part of Middle shoal."

Mooring buoys.—Delete the paragraph lines 3 and 4 from top, and insert:—

There are four mooring buoys in the harbour, situated about half a cable off and parallel to the wharf extending from Spanish tower.

Harbour works.—Delete the whole paragraph, and insert:—

The construction of the mole or breakwater along the rocks north-eastward of Spanish fort is completed. It extends 7½ cables in a 65° true direction from Spanish fort, to its elbow, from whence it curves in a south-east direction for a further distance of 3½ cables; its extreme forms the north side of entrance to the harbour.

Jetty lights.—Line 3: After "exhibited" insert "consisting of sentence and insert" at a height of 12 and 18 feet."

Page 22.—**Directions.**—Line 12: After "time" and the remainder of the paragraph: The neighbourhood has been dredged, and there is now a depth of 11 fathoms through the entrance between the end of the breakwater and the new two red light-buoys.

Line 36: After the word "so" delete remainder of sentence.

Further dredging is intended.

Chart 246, Ras Makhabez to Benghazi.

Page 26.—Khoms bay.—The light on the mole at Port Ligata has been abolished.

Plan of Cape Misrata anchorage on 246.

Page 29.—Ras Lorug.—The light has been discontinued.

Plan of Mersa Zafran on 246.

Page 32.—Mersa Zafran.—Lights.—The light formerly exhibited from a position eastward of the ruined fort, and the lights exhibited from the leading beacons, have been discontinued. The leading beacons have been removed.

Page 33.—Bottom line: *Delete* "the buoy."

Buoys.—The two conical mooring buoys have been withdrawn.

Chart 246, Ras Makhabez to Benghazi.

Page 34.—Shoal.—A rocky bank, dangerous to navigation, is reported to exist between Ras al Omja and Ras el Berek, at a distance of from 3 to 4 miles from the shore.

Chart 241, Benghazi to Derna.

Page 38.—Rock.—A 2-fathom rock lies about 6½ cables, eastward, from the southern group of the Hamud rocks.

Lines 39 and 40: *Expunge* and *substitute*:—

Anchorages.—Small vessels anchor on the south-eastern side of the middle group.

Page 39.—Bueb bay.—Shoal.—A shoal, with about 2¼ fathoms of water over it, but which has not been closely examined, is reported to exist off Zuitana, at a distance of about 3 miles from the shore.

Page 40.—Shoal.—A rocky shoal, about three-quarters of a cable in extent, and with a depth of less than 6 feet over it, is situated about 7 miles, south-westward from Benghazi, and about 3 miles from the shore.

Pages 41 to 45.—*Plan 1978, Benghazi*, referred to in these pages, has been superseded by plan on new edition of chart 241.

Plan of Benghazi on 241.

Page 41.—Line 26: *For* "a conspicuous" *read* "the conspicuous"; *after* "monument" *insert* "mentioned above."

Mersa Juliana.—Depths.—The depths in the entrance channel, as far as abreast of the mole, are now from 14 to 16 feet.

Page 42.—Mole.—The extension of the North mole is completed, and the lighthouse has been moved to its new extremity.

Light.—The light on the head of the mole has an elevation of 35 feet.

Page 42 continued. Plan 241.

Buoy.—The red buoy, marking the mole extension works, has been withdrawn.

Posts.—Various shoals in the port are marked by posts or beacons.

Page 43.—Prohibited anchorage.—Vessels are cautioned not to anchor or fish within the area comprised by two lines drawn in a 315° direction, for a distance of 6 miles, from two points on the high-water line, situated respectively 850 feet, north-eastward, and 1,120 feet, south-westward, from Tahun ta Ria point lighthouse.

Harbour works.—A berth with a depth of about 12 feet has been dredged on the inner side of the mole. Eastward of the Juliana peninsula, a berth has been dredged to a depth of about 12 feet, and there is the same depth in the channel leading to it.

Plan of Derna on 241.

Page 50.—Derna.—Light.—On account of extension works in progress, vessels should keep at a distance of not less than 90 yards from the light on the mole.

Buoys.—The four conical red and white buoys marking the 3-fathom line have all disappeared.

Two buoys mark the entrance to the port, that on the starboard hand is painted white, and that on the port hand, red.

A red mooring buoy has been placed in the inner part of the port.

Page 51.—Pier.—The landing pier is now disused, and the light is no longer exhibited.

Chart 244, Derna to Mersa Matruh.

Coast.—A small cove, situated 6 miles, westward, of Ras et Tyn, at the outlet of Wadi Aghik, is known as Mersa Bil Aghik.

The bay southward of Ras et Tyn is known as Mersa Omelgaram.

Page 53.—*For* "**Ras allem el Milhr**" *read* "**Minqar el Mekab** (Ras allem el Milhr)."

Pages 53, 54.—*For* "**Marsa Tebruk**" *read* "**Mersa Tobruk** (Tebruk)." *For* "Ras Tebruk" *read* "Ras Tobruk (Tebruk)."

Coast.—Ras el Din is the name given to the point situated about 3¾ miles eastward of Ras el Ghain.

Page 55.—Line 6: *Add*:—

A patch of 1¼ fathoms has been found at 5¼ miles westward of Ras el Ghain, at 9¼ cables off-shore. It is marked by a red buoy.

Ras al Milhr (Ras el Melh) (*Lat. 31°56′ N., Long. 25°8′ E.*) is reported to lie 4¾ miles N. 44° W. of the position now shown on the charts. Shoal water extends about one mile from its extremity (1917).

[illegible] 12 continued. [illegible]

Buoy.—The red buoy, marking the mole extension works, has been withdrawn.

Ports.—Various shoals in the port are marked by posts or beacons.

Page 43.—Prohibited anchorage.—Vessels are cautioned not to anchor or fish within the area comprised by two lines drawn in a 315° direction, for a distance of 5 miles, from two points on the high-water line, situated respectively 6 0 feet north-eastward and 7,150 feet south-eastward from Tabian la Rio point lighthouse.

Harbour works.—A berth with a depth of about 12 feet has been dredged on the inner side of the mole. Eastward of the Dalmia peninsula, a berth has been dredged to a depth of about 12 feet, and there is the same depth in the channel leading to it.

Plan of Port, no. 2[illegible].

Page 50.—Marsa.—Light.—On account of extension works in progress, vessels should keep at a distance of not less than 50 yards from the light on the mole.

Buoys.—The four conical red and white buoys marking the 3 fathom line have all disappeared.

Two buoys mark the entrance to the port, that on the starboard hand is painted white, and that on the port hand, red.

A red mooring buoy has been placed in the inner part of the port.

Page 51.—Pier.—The landing pier is now dredged, and the light is no longer exhibited.

Plan [illegible] Marsa Marsa.

Coast.—A small cove, situated 6 miles westward, or [illegible] Fort, at the outlet of Wadi A'yah, is known as Marsa El A'yah.

The bay southward of Ras et Tin is known as Marsa Umm'ajrah.

Page 53.—For "Ras aiem el Mihir" read "Hinger el Mehah (Ras aiem el Mihir)."

Pages 53, 54.—For "Marsa Tobruk" read "Marsa Tobruk (Tobruk). For "Ras Tobruk" read "Ras Tobruk" (Tobruk)."

Coast.—Ras el Hir is the name given to the point situated about 3½ miles eastward of Ras el Mihir.

Page 54.—Line 6. [illegible]

A patch of 1½ fathoms has been found at 3½ miles westward of Ras el Mihir, at 3½ cables offshore. It is marked by a red buoy.

Ras al Mihir (Ras el Mehah) (Ras [illegible] Lat. [illegible] N.) is reported to lie 1½ miles N. 11° W. of the position now assigned on the chart. Local water extends about one mile from its westward (19° [illegible]

Page 55 continued. Chart 244.

The point is not high and cliffy, as stated in the volume, but is a low, sandy, ill-defined point. It is recommended to give it a berth of 3 miles.

The bay between Ras al Milhr and Port Bardia is known as Mersa Moreisa.

Line 9: *For* **"Gulf of Sollum"** *read* **"Gulf of El Sellum."**

Line 13: *For* **"Port Bardia"** *read* **"Mersa Burdi Suleiman** (Port Bardia)."

Line 22: *For "Akaba es Sollum on chart 244" read "Plan of El Sellum."*

Expunge lines 23 to 33 and *substitute*:—

Beacon point is a small projection, 30 feet high, having a small plateau, 90 feet high, towards its north-east side. The cliffs end here and the coast trends to the westward, forming the anchorage of Sellum, which is well protected from northerly and westerly winds. A shoal extends from the south side of this point.

El Hashafa, two small islets, the highest of which is 65 feet high, are situated 2¼ miles northward of Beacon point, and one cable offshore.

Shoal.—A shoal, with a depth of 6 fathoms, lies about a mile north-eastward of Beacon point.

Sellum.—The outer, a very good anchorage for large vessels in from 5 to 7 fathoms, sand and weed, is in the bay, about a quarter of a mile westward of Beacon point.

Observatory point is a plateau, 73 feet high, on which are the coastguard buildings. A stone pier, 300 feet long, extends south-westward of the point, with 17 to 21 feet alongside, but is only suitable for small vessels. There is a warping buoy close off the pier end.

Anchorage.—There is good anchorage for small vessels in 4¾ fathoms, sand and weed, at a cable south-south-eastward of the pier.

North-westward of the pier is a well-sheltered bay, with 12 to 15 feet, and with a rubble breakwater, 500 feet long, on its eastern side, which forms a lighter harbour with 3 to 5 feet of water.

Yorke patches lie 2¾ cables southward of the pier and consist of a number of rocks, with a depth of 17 to 18 feet.

Buoy.—A black and white horizontally striped spherical buoy marks the patches.

Fort Sellum, on old white fort on the edge of the plateau, is the only conspicuous mark when approaching Sellum from the south-eastward.

Coast.—The coast, after passing the small bay westward of Observatory point, is low and sandy, and trends first to the southward and then gradually to the eastward when about 6 miles from Sellum.

Page 50, *add* new:

The point is not high and cliffy, as stated in the volume, but is a low, sandy, undefined point. It is recommended to give it a depth of 3 fathoms.

The bay between Ras el Mîdr and Port Bardia is known as Mersa Moreiss.

Line 9: *For* "**Gulf of Solium**" *read* "**Gulf of El Sellum.**"

Line 15: *For* "**Port Bardia**" *read* "**Mersa Bardi Sulei-man** (Port Bardia)."

Line 22: *For* "... *delete* "*or on clues 244*" *read* "*Pilot of El Sellum.*"

Insert lines 24 to 42 and *substitute*:—

Beacon point is a small projection, 30 feet high, having a small plateau, 90 feet high, towards its north-east side. The cliffs and here and the coast trends to the westward, forming the and range of Sellum, which is well projected from northerly and westerly winds. A shoal extends from the south-east of this point.

El Hashafa, two small islets, the highest of which is 65 feet high, are situated 2½ miles northward of Beacon point, and one cable off-shore.

Shoal.—A shoal, with a depth of 6 fathoms, lies about a mile north-eastward of Beacon point.

Sellum.—The outer, a very good anchorage for large vessels in from 5 to 7 fathoms, sand and weed, is in the bay, about a quarter of a mile westward of Beacon point.

Observatory point is a plateau, 73 feet high, on which are the coastguard buildings. A stone pier, 200 feet long, extends south-westward of the point, with 17 to 21 feet alongside, but is only suitable for small vessels. There is a warping buoy close off the pier end.

Anchorage.—There is good anchorage for small vessels in 4½ fathoms, sand and weed, at a cable north-south-eastward of the pier.

North-westward of the pier is a well-sheltered bay, with 12 to 18 feet, and with a rubble breakwater, 300 feet long, on its eastern side, which forms a lighter harbour with 3 to 5 feet of water.

Yorke patches lie 2½ cables southward of the pier and consist of a number of rocks, with a depth of 17 to 18 feet.

Buoy.—A black and white horizontally striped spherical buoy marks the patches.

Fort Sellum, an old white fort on the edge of the plateau, is the only conspicuous mark when approaching Sellum from the south-eastward.

Coast.—The coast, after leaving the small bay westward of Observatory point, is low and sandy, and trends first to the southward and then gradually to the westward when about 6 miles from Sellum.

Page 55 continued. Charts 244, Derna to Mersa Matruh, and 374, Mersa Matruh to Alexandria.

The Great Libian plateau, the eastern edge of which ends near Sellum, thence runs in a south-easterly direction, gradually receding from the coast. Near the coast it varies from 600 to 640 feet in height, and is intersected by numerous short wadis. The summit is very flat, the soil consisting of sand and stones, and it is sparsely covered with very low scrub, with occasional patches of very rudimentary cultivation.

There remain in this district many evidences of Roman occupation, especially rock cisterns, a very good specimen of which may be seen at Bir Wa'er, 4 miles westward of Fort Sellum.

Coast.—The coast eastward of Sellum is low; a ridge of white sand hills backs the shore, the highest for 17 miles being 112 feet high.

Between the inland plateau, and the coast there is a nearly continuous strip of loam-covered limestone, and a good deal of this level area is cultivated, and maintains a sedentary population. Though water is scarce, it is not entirely absent, and barley of good quality is grown. The villages are usually at places close to the shore where a break in the coastline makes a safe harbourage for boats and small sailing vessels. The width of this plain varies from a few hundred yards in the western part, to as much as 20 miles in the eastern part as the plateau recedes further from the sea.*

Ras Seiyada, 17 miles eastward of Sellum, is a low, rocky point, with a rock 5 feet high off it.

Caution.—Vessels should not approach this coast within 2 miles, until within 5 miles of Sellum.

Chart 244, Derna to Mersa Matruh.

Shoals.—Eastward of El Sellum, for a distance of about 17 miles, shoals, with depths of less than 5 fathoms, extend about 2 miles offshore in places.

Page 56.—Sidi Barrani (*Lat. 31° 36′ N., Long. 25° 59′ E.*) has a conspicuous coastguard station, and is connected with Mersa Matruh by a motor road.

For "**Ras Bulau**" *read* "**Ras Abu Lahu** (Bulau)."

Spongers cove, situated about one mile, westward, from Ishaila rocks, is also known as Mersa Gergub.

Plan 3567, Mersa Matruh. Var. 2° 56′ W.

Pages 57-58.—*Cancel* from line 1 on page 57 to line 18 on page 58, inclusive, and *substitute*:—

Mersa Matruh, eastward of Ras Labeit, is an indentation in the coast, $1\frac{6}{10}$ miles long east and west, and 7 cables deep; it is completely

* Journal Royal Geographical Society, Feb., 1916.

Page 55 continued (Charts 222, from to Mere Marsa, and 224, Mersa Mot to to Hawadia).

The Great Libian plateau, the eastern edge of which ends near Sollum, thence runs in a south-easterly direction, gradually receding from the coast. Near the coast it varies from 600 to 610 feet in height, and is intersected by numerous short wadis. The summit is very flat, the soil consisting of sand and stones, and it is sparsely covered with very low scrub, with occasional patches of very indifferent cultivation.

There remain in this district many evidences of Roman occupation, especially rock cisterns, a very good specimen of which may be seen at Bir Wa'ab, a mile westward of Fort Sollum.

Coast.—The coast eastward of Sollum is low; a ridge of white sand hills backs the shore, the highest for 17 miles being 112 feet high.

Between the inland plateau, ——— and the coast there is a nearly continuous strip of lagoon-covered lagoons, and a good deal of this level area is cultivated, and maintains a sedentary population. Though water is scarce, it is not entirely absent, and barley of good quality is grown. The villages are usually at places close to the shore where a break in the coastline makes a safe harbourage for boats and small sailing vessels. The width of this plain varies from a few hundred yards in the western part, to as much as 20 miles in the eastern part, as the plateau recedes further from the sea.

Ras Sivada, 17 miles eastward of Sollum, is a low, rocky point with a rock 5 feet high off it.

Caution.—Vessels should not approach this coast within 2 miles until with in 5 miles of Sollum.

(Map 224. Dawa to Mersa Matruh.)

Shoals.—Between Ras el Kalbin, for a distance of about 17 miles, shoals, with depths of less than 7 fathoms, extend about 2 miles offshore in places.

Page 56.—Sidi Barrani (Lat. 31° 36′ N., Long. 27° 29′ E.) has a coastguard station, and is connected with Mersa Matruh by a motor road.

For "**Ras Dulan**" see "**Ras Abu Lahn** (Dulan)."

Sponges cove, situated about one mile westward, from Ishaila rocks, is also known as Mersa Gargub.

(Map 224, Mersa Matruh to Sidi Barrani.)

Pages 57-58.—Omit from line 1 on page 57 to line 18 on page 58, inclusive, and substitute:—

Mersa Matruh, eastward of Ras Ladabit, is an indentation in the coast, 1½ miles long east and west, and 7 cables deep; it is completely

Pages 57-58 continued. Plan 3567.

sheltered from seaward by a reef and rocks extending 1½ cables, eastward, from Ras Labeit, and by Matruh reef, a line of small islets, rocks, and reefs, upon which the sea breaks heavily, extending half a mile westward from the eastern entrance point, which is known as Matruh point. Several of the rocks of Matruh reef are awash, and on the largest islet is a conspicuous white rock, 10 feet high; there are two boat passages through Matruh reef available for boats only in fine weather.

A conspicuous coastguard fort, with flagstaff, stands on Matruh point, about 4 cables from its extreme.

Depths.—Vessels up to a draught of 15 feet can enter the harbour at all states of the tide.

Western shore.—With the exception of the narrow rocky shelf which fringes Ras Labeit to the westward, the western shore of the Mersa is flat sand, subject to inundation and change, forming the entrance to a large lagoon which extends in a westerly direction for about 2½ miles, with a breadth of about three-quarters of a mile, and carrying an average depth of from 3 to 5 fathoms. This lagoon appears to have been extensively used by the Romans in ancient days as a harbour, numerous ruins, and, in places, remains of wharves and piers being still visible.

The ruins of the ancient town of Matruh, known as Old Matruh, are situated in an oasis, at the western extreme of this lagoon. The entrance to the lagoon has greatly silted up in recent years, and in 1916 it was just possible to get a boat through with 2 feet of water at high water.

Southern shore.—A long low range of sandhills, about 30 feet high, and partially covered by scrub, extends along the southern shore of the Mersa. This low range is backed by an undulating plain, cultivated in parts, which extends to the base of a range of dark, low undulating hills, about 200 to 300 feet high, situated about 4 miles inland.

A conspicuous white mosque, with minaret 114 feet high, stands on the shore sandhills directly south of Ras Labeit. This mosque contains the remains and tomb of the Sheik Sidi el Awam. Four cables eastward of the mosque is a sandhill, 41 feet high, and immediately eastward of this are the numerous buildings of the village of Matruh, and the coastguard buildings.

Harbour.—The eastern end of the Mersa forms the harbour or anchorage, which is protected on the west by a rubble breakwater, extending from the shore for 490 yards in a south-westerly direction, and on the north, by the rocky point, about 60 feet in height, separating the harbour from the sea. The eastern shore of the harbour is flat and sandy bounding the shores of the westernmost of a chain of

[illegible] extends for 14 cables, east-ward from [illegible] reef, [illegible] of small rocks, [illegible] entering [illegible] a mile [illegible] eastern point, which is known as [illegible] Marsh [illegible] are awash, and on [illegible] 20 feet high [illegible] are two [illegible] passages through [illegible] boats only in the [illegible]

A conspicuous [illegible] marsh [illegible] from its [illegible]

Depths.—Water up to a depth of 7 feet [illegible]

Western shore.—[illegible] the narrow rocky shelf [illegible] the western shore of the [illegible] the [illegible] for about 2½ [illegible] and [illegible] and [illegible] days [illegible] and [illegible]

[illegible] are [illegible]

Southern shore.—[illegible] 30 feet [illegible]

[illegible] 14 feet high, stands on [illegible] four tables [illegible] Marsh [illegible]

Harbour.—[illegible] water [illegible]

salt lagoons which extend eastward almost to Ras alem Rum. The southern shore of the harbour is flat and sandy and subject to inundation.

Shoals.—A shoal, extending southward from Matruh reef, occupies the central part of the Mersa. It is studded with rocks, on which are from 2 to 3 feet of water, with from 5 to 7 feet of water between them, the most conspicuous being the Djaafar, Sennusi, and Askeri rocks, which break heavily even in moderate winds.

Presidency rock, with 12 feet over it, lies 80 yards, north-eastward, from the western entrance beacon, and Nury rock, with 5 feet over it, lies 100 yards, north-eastward, from the eastern entrance beacon.

Two cables, south-westward, from the western entrance beacon is an 8-foot rock, marked on its eastern side by No. 1 black conical buoy.

Kingston rock, with 12 feet over it, lies on the southern side of the channel northward of the inner leading beacons, and close southward of No. 5 black conical buoy. Two cables, eastward, of Kingston rock is a reef awash, with some outlying rocks.

Entrance beacons.—The navigable entrance, between the rocks extending eastward from Ras Labeit and Matruh reef, is 100 yards wide.

Pole beacons, painted red and white, standing on the outer rocks, mark the entrance; that on the eastern side has a red and white disc as topmark, and that on the western side a white triangle.

Entrance leading beacons.—Two pole beacons, each surmounted by a triangle, stand on the western side of the Mersa, the front beacon being a few yards inside the high-water line, and the rear beacon, 1,832 yards from the front beacon, standing on the summit of the low ridge on the south side of the lagoon. These beacons in line 229° leads through the entrance in mid-channel.

Inner leading beacons.—Two pole beacons, painted black and white, stand on the southern shore of the Mersa, about 2 cables eastward of the minaret. These beacons in line 151° lead midway between the shallow banks in the western reach.

Harbour beacon.—A small beacon, with triangular topmark, stands about one cable, southward, of Harbour point.

Channel.—A channel, partly formed by dredging, with a least depth of 15 feet, and a least breadth between the buoys of 80 yards, leads westward and southward of the central shoal to the anchorage eastward of the breakwater.

Buoys.—Eight black conical buoys, numbered 1 to 8 from seaward, mark the western and southern sides of the channel.

Six conical buoys, painted black and white horizontally, 1 to 5 and 7, mark the eastern and northern sides of the channel.

(pages 13–18 continued. From page 13.)

salt lagoons which extend eastward almost to Ras el Ain. The southern shore of the harbour is flat and sandy and subject to inundation.

Shoals.—A shoal, extending southward from Matrah reef, occupies the central part of the Mirsa. It is studded with rocks, on which are from 2 to 3 feet of water, with from 5 to 7 feet of water between them; the most conspicuous being the Djiatar, Sennasi, and Aden rocks, which break heavily even in moderate winds.

Freshdeny rock, with 12 feet over it, lies 60 yards, northwestward, from the western entrance beacon, and Nury rock, with 5 feet over it, lies 150 yards, north eastward, from the eastern entrance beacon.

Two cables, south-westward, from the western entrance beacon, is an 8-foot rock, marked on its eastern side by No. 1 black conical buoy.

Kingston rock, with 12 feet over it, lies on the northern side of the channel northward of the front leading beacons, and close southward of No. 5 black conical buoy. Two cables, eastward, of Kingston rock is a reef awash, with some outlying rocks.

Entrance beacons.—The navigable entrance, between the rocks extending eastward from Ras Labsh and Kingston reef, is 150 yards wide.

Pole beacons, painted red and white, standing on the outer rocks, mark the entrance; that on the eastern side has a red and white diamond, and that on the western side a white triangle.

Entrance leading beacons.—Two pole beacons, each surmounted by a triangle, stand on the western side of the Mirsa, the front beacon being a few yards inside the high-water line, and the rear beacon, 1,382 yards from the front beacon, standing on the summit of the low ridge on the south side of the lagoon. These beacons in line 290° leads through the entrance in mid channel.

Inner leading beacons.—Two pole beacons, painted black and white, stand on the southern shore of the Mirsa, about 2 cables eastward of the minaret. These beacons in line 151° lead midway between the shallow banks in the western reach.

Harbour beacon.—A small beacon, with triangular topmark, stands about one cable, southward of harbour point.

Channel.—A channel partly cleared by dredging, with a least depth of 15 feet, and a least breadth between the buoys of 80 yards, leads westward and southward of the central shoal to the anchorage eastward of the breakwater.

Buoys.—Eight black conical buoys, numbered 1 to 8 from seaward, mark the western and southern sides of the channel.

Six conical buoys, painted black and white horizontally, 5 and 7, mark the eastern and northern sides of the channel.

Pages 57-58 continued. Plan 3567.

A red mooring buoy, in 25 feet of water, lies 2¾ cables, north-eastward, from the outer end of the breakwater. A small red mooring buoy for the use of lighters lies eastward of Drama point.

Page 58. — Directions. — When approaching the entrance, a vessel should bring the leading beacons in line 229° as soon as they can be distinguished, in order to avoid Presidency and Nury rocks. When Pinnacle rock is seen open southward of the western entrance beacon, steer to pass midway between Nos. 1 buoys. Thence steer for the minaret of the mosque until the inner leading beacons are in line 151°. Course should then be steered with these beacons in line until between Nos. 4 buoys, when steer for the beacon on Harbour point, bearing 89°, until between Nos. 7 buoys, when course can be shaped for the harbour entrance. When leaving the line of the inner leading beacons between Nos. 4 buoys, the helm should be put over in good time, in order to avoid Kingston rock and the dangers southward of it.

Anchorage.—The bottom is of mud over sand, and the holding ground is only fair. The best berth is to secure to the mooring buoy with the ship's head West, and a stern anchor laid out. In fine weather, a vessel can anchor, with both anchors, in the deep water 1½ cables eastward of the breakwater, with her stern secured to the mooring buoy.

Piers. — Vessels discharging cargo can berth alongside lighters which are moored to the north shore of Harbour point, also, alongside the wooden pier west of Drama point, where there is a depth of not less than 18 feet. There is a wooden landing pier eastward of Drama point, and another on the north shore of the harbour for boats communicating with the fort.

Supplies.—Fresh provisions can be obtained in small quantities. Water is scarce.

Population.—The population of the village consists of a few Greeks, who trade chiefly with the Bedouin tribesmen and local herdsmen.

Communications.—There is weekly communication with Alexandria by steamer, also railway and telegraphic communication.

Tides.—Springs rise 1½ feet, neaps 9 inches. During northerly winds the water occasionally banks up as much as 3 feet above the datum of the soundings. This banking up of the water gives a useful indication of the approach of bad weather, and a low water in the harbour is a sign of settled weather.

Chart 874, Mersa Matruh to Alexandria.

Page 59.—Ras el Kanais.—There is a coastguard post about 2 miles southward of the cape.

Pages 57–58 continued. (Plan 1507.)

A red mooring buoy, in 20 feet of water, lies 2¼ cables north-eastward, from the outer end of the breakwater. A small red mooring buoy for the use of lighters lies eastward of Drama point.

Page 58. — Directions. — When approaching the entrance, a vessel should bring the leading beacons in line 229° as soon as they can be distinguished, in order to avoid Presidency and Nury rocks. When Pinnacle rock is seen open southward of the western entrance beacon, steer to pass midway between Nos. 1 buoys. Thence steer for the minaret of the mosque until the inner leading beacons are in line 157°. Course should then be steered with these beacons in line until between Nos. 4 buoys, when steer for the beacon on Harbour point, bearing 89°, until between Nos. 7 buoys, when course can be shaped for the harbour entrance. When leaving the line of the inner leading beacons between Nos 4 buoys, the helm should be put over in good time, in order to avoid Kingston rock and the dangers southward of it.

Anchorage.—The bottom is of mud over sand, and the holding ground is only fair. The best berth is to secure to the mooring buoy with the ship's head West, and a stern anchor laid out. In fine weather, a vessel can anchor, with both anchors, in the deep water 1½ cables eastward of the breakwater, with her stern secured to the mooring buoy.

Piers. — Vessels discharging cargo can berth alongside lighters which are moored to the north shore of Harbour point, also, alongside the wooden pier west of Drama point, where there is a depth of not less than 18 feet. There is a wooden landing pier eastward of Drama point, and another on the north shore of the harbour for boats communicating with the fort.

Supplies.—Fresh provisions can be obtained in small quantities. Water is scarce.

Population.—The population of the village consists of a few Greeks, who trade chiefly with the Bedouin tribesmen and local herdsmen.

Communications.—There is weekly communication with Alexandria by steamer, also railway and telegraphic communication.

Tides.—Springs rise 1½ feet, neaps 9 inches. During northerly winds the water occasionally banks up as much as 3 feet above the datum of the soundings. This banking up of the water gives a useful indication of the approach of bad weather, and a low water in the harbour is a sign of settled weather.

(Part 27). Marsa Matruh to Alexandria.

Page 59.—Ras el Kanais.—There is a coastguard post about 2 miles southward of the cape.

Page 59 continued. Chart 374.

Ras el Daba'a (Dhabba).—There is a coastguard watch tower on the cape. The village of Daba'a is on the railway line between Alexandria and Matruh.

Bir Gabrisa (*Lat. 30° 59′ N., Long. 28° 45′ E.*) has a coastguard post. There is a railway station at the village of Sidi abd el Rahman, about 1½ miles distant.

Page 60.—El Amaid light is permanently discontinued.

Page 61.—Abusir reef.—Line 4: *After* "rock" *omit* remainder of paragraph and *insert* "(*Lat. 31° 00′ N., Long. 29° 23′ E.*), with 9 feet water, and with Arabs tower bearing 113° true, distant 6½ miles, P.D."

Plan 3119, Alexandria harbour.

Page 63.—*Expunge* lines 28 to 30.

Page 64.—Great pass.—Buoys.—A black can buoy has been moored on the northern side of the entrance to the Great pass.

Page 65.—Line 43: *Expunge* "and North shoal light-beacon."

Page 66.—Lines 14 and 15: *Expunge* "and North shoal red light-beacon to the northward."

Page 68. — Vessels are not permitted to enter Alexandria without a pilot. The pilot tug is stationed at the entrance to meet all approaching vessels.

Plan 243, Port of Alexandria.

Page 81.—New Port.—A mole or breakwater, 2½ cables in length in an 82° true direction, has been built from Fort Kaid Hai, ending at about half a cable southward of Yarf el Wasat, a patch of 2½ fathoms.

Line 33: *For* "above water" *read* "awash."

Line 35: *After* "Pharallon" *insert* "El Nassar, a rock awash, lies 1¾ cables north-west of the Pharallon, within the 3-fathoms contour line.

Page 82.—Line 4: *Omit* "or between it and Diamond rock"; also the next sentence.

Lines 7 and 10: *For* "Pharos castle" *read* "Fort Kaid Bai."

Plan, Damietta mouth, on chart 2630.

Page 86.—Damietta mouth.—When the sadd (barrier) is constructed to raise the water level in this branch, navigation between Damietta and the sea is impossible from April to August.

Chart 2630, Alexandria to Port Said.

Page 87.—*After* line 45 *add*: "The coast is marked by beacons at 2 and 8 miles, respectively, south-eastward from Kawa burun, and 3 miles, south-eastward, from Debeh fort is another beacon."

Page 30 continued. After line 7.

Ras el Dab'a's (Dabba).—There is a conspicuous white tower on the cape. The village of Dab'a is on the railway line between Alexandria and Marsah.

El'r Gabrisa (*lat.* 30° 30′ *N., long.* 29° 27′ *E.*) has a conspicuous post. There is a railway station at the village of Kidi abd el Rahman, about 1½ miles distant.

Page 80.—El Amaid light is permanently discontinued.

Page 61.—Abusir reef.—*Line 4. After "rock" omit remainder of paragraph and insert* "(*lat.* 31° 10′ *N., long.* 27° 4′ *E.*), with 9 feet water, and with Arabs tower bearing 118° true, distant 6½ miles, E.N.E."

Plan 27(2). Alexandria harbour.

Page 63.—*Approx. lines 22 to 30:*

Page 64.—Great pass.—Buoys.—A black can buoy has been moored on the northern side of the entrance to the Great pass.

Page 65.—*Line 13: Approx.* "and North-east light-beacon."

Page 66.—*Lines 14 and 15: Approx.* "and North-east and light-beacon to the northward."

Page 68. — Vessels are not permitted to enter Alexandria without a pilot. The pilot tug is stationed at the entrance to meet all approaching vessels.

Plan 27(4). Port of Alexandria.

Page 81.—New Port.—A mole or breakwater, 2½ miles in length in an 82° true direction, has been built from Fort Kait Bai, ending at about half a cable southward of Ya'r el Wasat, a depth of 2½ fathoms.

Line 33: After "above water" read "awash."

Line 35: After "Pharaglon" read "El Kassar, a rock awash, lies 1½ cables north-west of the Pharaglon, within the 3-fathoms contour line.

Page 82.—*Line 4: Omit "or between it and Diamond rock", also the next sentence.*

Lines 7 and 10: After "Pharos castle" read "Fort Kait Bai."

Plan 27(5). Damietta mouth, see next page.

Page 86.—Damietta mouth.—When the sand (barrier) is constructed to raise the water level in its branch, navigation between Damietta and the sea is impossible from April to August.

(Page 86(2). Alexandria to Port Said.

Page 87.—*After line 12 add:* "The coast is marked by beacons at 2 and 3 miles, respectively, south-eastward from Kawa burun, and 3 miles south-eastward from Dekel fort is another beacon."

Chart 2630.

Page 88.—*After* line 46 *add*: "At 2½ miles further eastward the coast is marked by a red beacon."

Chart 2573, Damietta to El Arish.

Page 98.—Line 24: *For* "270 feet" *read* "198 feet."

CHAPTER III.

Pages 110, 111.—*Plan 1885, Makri harbour*, referred to in these pages, has been superseded by plan on new edition of chart 1886.

Page 113.—*For* "**Mandraki harbour**" *substitute* "**Kastelorizo** (Mandraki) **harbour.**"

Bottom line: *After* the word "side" *omit* remainder of the sentence.

CHAPTER V.

Chart 2633, Markab to Ras en Nakura.

Page 156.—Lines 4, 6, 15, 21: *For* "Bayas" *read* "Payas (Bayas)."

Plan 2765, Ruad island anchorage.

Page 167.—Ruad island.—Line 7: *After* "it" *insert* "marked by a conical buoy, and having avoided the patch of 2½ fathoms situated 1¼ cables westward of the ancient wall at the north end of the island."

Page 168.—Shoal.—A 4-fathom shoal exists on the bank westward of Sheik Jabber, at a distance of 1¼ miles from the shore.

APPENDIX V.

List of charts published and withdrawn since the publication in 1915 of the First Edition of Mediterranean Pilot, Vol. V., and which affect this work.

CHARTS PUBLISHED.

241	Plan of Benghazi added.
248	Plan of Tripoli harbour.
1886	Plan of Makri harbour added.

CHARTS WITHDRAWN.

1978	Benghazi.
1885	Makri harbour.

INDEX TO NEW NAMES.

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